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I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2003904176 for a patent by WATTLEVILLA PTY LTD as filed on 08 August 2003.

I further certify that the above application is now proceeding in the name of TRONMIST PTY LTD pursuant to the provisions of Section 113 of the Patents Act 1990.

WITNESS my hand this
Seventeenth day of August 2004

JULIE BILLINGSLEY
TEAM LEADER EXAMINATION
SUPPORT AND SALES



P/00/009
Regulation 3.2

AUSTRALIA

Patents Act 1990

PROVISIONAL SPECIFICATION

Invention Title: "A METHOD AND APPARATUS FOR
MARKING BAKERY PRODUCTS"

The invention is described in the following statement:

TITLE

"A METHOD AND APPARATUS FOR MARKING BAKERY PRODUCTS"

FIELD OF THE INVENTION

This invention relates to a method and apparatus for marking bakery products. In particular, the invention relates primarily to the marking of biscuits. However, it should be appreciated that the method may be used for other bakery products such as breads, pastries or the like.

BACKGROUND OF THE INVENTION

For many years biscuit manufactures have been branding their biscuits so that consumers are able to recognise the type of biscuits they are consuming. This allows consumers to identify the biscuit and hopefully repurchase the biscuit if it is to their taste. It also allows manufacturers to place other types of advertising material on their biscuits if the manufacturers so desire.

The most common method of branding biscuits is to cause valleys and ridges to be formed in the biscuit to provide viewable shapes, patterns, letters and/or words. The valleys and/or ridges are usually obtained by shaping biscuit dough prior to baking of the biscuits. The shaping of the biscuits is usually obtained by making a mould that has corresponding valleys and/or ridges located within the mould. Biscuit dough is pressed into the mould and when the dough is removed, the top of the biscuit dough has the associated valleys and/or moulds. The biscuit dough is then baked to form biscuits with desired markings.

There are several problems with marking biscuits using a mould. Firstly, the moulds are expensive to manufacture and can only be used to provide only that shape. Secondly, placing biscuit dough into the moulds is labour intensive and time consuming. Lastly, the shapes, patterns, letters and/or words formed on the biscuit are of the same colour biscuit as the other part of the biscuit. Therefore, the shapes, patterns, letters and/or words are often difficult to recognise. A consumer therefore has to make a conscious effort to look at the top of the biscuit to be able to read the shape,

patterns, letters and/or words.

OBJECT OF THE INVENTION

It is an object of the invention to overcome or alleviate one or more of the above disadvantages or to provide the consumer with a useful or
5 commercial choice.

SUMMARY OF THE INVENTION

In one form, although not necessarily the broadest or only form, the invention resides in a method of marking bakery products including the steps of:

10 mixing a bakery dough to make a bakery product

applying an ink to the bakery dough and

baking the bakery dough to make the bakery product;

wherein the ink comprises:

glycerol between the percentages 30 to 60 percent by volume

15 solvent between the percentages 30 to 60 percent by volume

sucrose between the percentages 10 to 30 percent by volume

water between the percentages 1 to 30 percent by volume

colouring agent between the percentages 0.5 to 15 percent by
volume.

20 The mixing of the bakery product may be completed by hand

and/or using machinery.

The ink may be applied manually or automatically through the use of a machine. Preferably, the ink is applied to the bakery product using a stamp.

25 The bakery dough is normally baked in a conventional manner,

that is, using an oven.

The solvent is preferably an organic solvent. Solvents that may be used include anhydrous sodium sulphate, benzyl alcohol, croscarmellose sodium, ethyl acetate, ethyl alcohol, glycerol diacetate, glyceryl monoacetate, glycine, ethanol, isopropyl alcohol, L-leucine, talc, triethyl citrate, butanol, glyceryl triacetate and hexane. Most preferably, the solvent is ethanol.

30 The colouring agent may be depending chosen on the desired

colour of the ink. Suitable colouring agents may include carbon black 153, sunset yellow 110, carmiosine 122, brilliant blue 133 and other similar colouring agents.

Preferably, the ink that is used is DY-MARK Meat Branding Ink.

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The composition of the ink used may vary according to how the ink is applied to the bakery products. For example, if an ink pad is used, the ink may include glycerol at 30 percent by volume, solvent at 40 percent by volume, sucrose between at 20 percent by volume, water at 7 percent by volume and colouring agent at 3 percent by volume.

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In another example, if self inking system was used, the ink may include glycerol at 35 percent by volume, solvent at 45 percent by volume, sucrose between at 25 percent by volume, water at 2 percent by volume and colouring agent at 3 percent by volume.

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Embodiments of the invention will be described, by way of example only, with reference to the accompanying drawings in which:

FIG. 1 is a combined hand stamp and cutter used to produce ink marked biscuits.

BRIEF DESCRIPTION OF THE DRAWINGS

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FIG. 1 shows a combined hand stamp and cutter 10 used to make biscuits. The hand stamp and cutter 10 has been combined so that biscuit dough can be cut to a desired shape and stamped at the same time.

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The combined stamp and cutter 10 includes a hollow cylindrical housing 11. A circular edge 12 of the housing is sharp and is used to cut biscuit dough into a circular shape. It should be appreciated that shape of the edge 12 may be changed to vary the shape of the biscuits.

A shaft 13 extends through the housing 11 substantially along a central axis of the housing 11. The shaft 13 is mounted to a top of the housing and is able to reciprocate with respect to the housing 11.

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A stop 14 is located on the shaft to prevent the shaft from being reciprocated past a predetermined point. An internal spring 15 and an

external spring 16 are mounted to the shaft locate the shaft 13 in a desired rest position.

A stamp 17 is located at the end of the shaft and is located within the housing 11. The stamp 17 comprises a backing plate 18 and a stamping plate 19. The backing plate 18 is attached to an end of the shaft 13 and is removably attached to the stamping plate 19. The stamping plate 19 is normally made of plastic or rubber. The stamping plate 19 is cut to reflect the desired impression to be placed on a biscuit.

To make a batch of marked biscuits, biscuit dough is mixed and rolled into a sheet of desired thickness. DY Mark Meat branding ink is applied to the stamp plate 19 through the use of an inkpad (not shown). The combined stamp plate 19 and cutter 10 is located over the inkpad and the top of the shaft 13 is pushed toward the top of the housing 11 until the stamping plate 19 contacts the inkpad. The shaft 13 is released and returns to the rest position.

The combined stamp and cutter 10 is placed on the sheet of biscuit dough and force is again applied to the shaft 13. This causes the stamping plate 19 to contact the biscuit dough and apply ink to the biscuit dough. At the same time, the edge 12 of the housing 11 cuts the biscuit dough to produce an image. This process is repeated until all the biscuit dough is cut. The biscuit dough is then baked to produce the batch of biscuits.

The ink provides the advantage that when applied to the biscuit dough, the ink does not bleed into the biscuit dough and hence a clear, crisp image can be produced on the biscuit. Further, the ink is not affected by baking and does not burn. The application of ink allows a quick and efficient image to be placed on a biscuit. Different colours can be used to create a more noticeable image.

It should be appreciated that the ink may be applied to the biscuit dough at using any number of different methods. For example, a self-inking stamp and cutter may be used so that the inkpad is unnecessary. Alternatively, the biscuit dough may be cut separately and a separate stamp

used to apply the ink to the biscuit dough. Still alternatively, the ink may be used with an automatic baking machine in which the ink is applied in an automated fashion.

It should be appreciated that various other changes and
5 modifications may be made to the invention described without departing from
the spirit or scope of the invention.

DATED this Eighth Day of August 2003

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WATTLEVILLA PTY LTD

By its Patent Attorneys

FISHER ADAMS KELLY

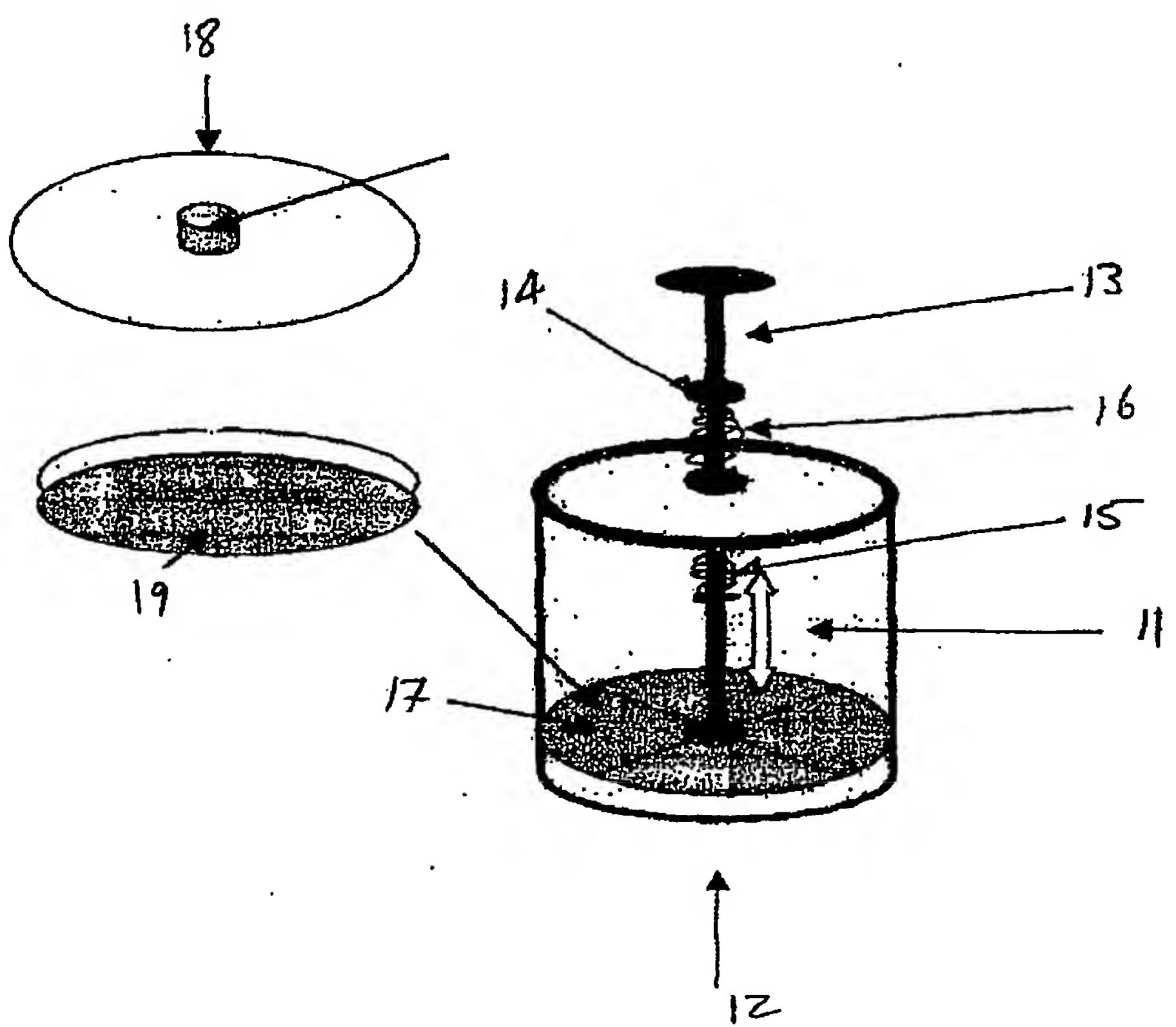


FIG 1